

Customer No. 33647

Patent
Attorney Docket No. ITW7510.067

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of : Matus, Tim A.
Serial No. : 10/605,931
Filed : November 6, 2003
For : One-Piece Consumable Assembly
Group Art No. : 3742
Examiner : Paschall, M.

RECEIVED
CENTRAL FAX CENTER
MAR 08 2006

CERTIFICATION UNDER 37 CFR 1.8(a) and 1.10

I hereby certify that, on the date shown below, this correspondence is being:

☐ deposited with the US Postal Service in an envelope addressed to **Mailing**
Commissioner for Patents, P.O. Box 1450, Alexandria, VA
22313-1450

☐ with sufficient postage as first class mail ☐ As "Express Mail Post Office to Addressee" Mailing Label No.

☒ transmitted by facsimile to Fax No.: 571-273-8300 addressed to **Examiner Paschall, M.** at the Patent and Trademark Office.
☐ transmitted by EFS-WEB addressed to **Examiner Paschall, M.** at the Patent and Trademark Office.

Date: March 8, 2006

Signature

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

PRE-APPEAL BRIEF CONFERENCE REQUEST

Dear Sir:

A Notice of Appeal is filed concurrently herewith. Applicant hereby requests pre-appeal review of the final rejection in the above-identified Application. Review is requested for the reasons set forth below.

Matus, Tim A.

S/N: 10/605,931

REMARKS

Claims 1-27 are pending in the present application. In the Final Office Action mailed November 03, 2005, the Examiner rejected claims 1-27 under 35 U.S.C §103(a) as being unpatentable over Luo (USP 5,856,647) in view of Raney et al. (USP 4,967,055).

Applicant believes the Panel has the authority to overturn these rejections because, as explained below, there is no disagreement in what the prior art teaches, therefore this request does not rely on an interpretation of the references. This request relies on the fact that claim limitations are absent from the references.

In rejecting claims 1-27 under 35 U.S.C. §103(a) as unpatentable over Luo in view of Raney et al., the Examiner maintains that Luo teaches "the *basic* torch," as claimed, but then admits that it does not teach combining multiple torch elements into an integral element (which is the invention herein). The Examiner relies on column 7 in Raney for the proposition that the electrode, tip/nozzle, and skirt cup can be nested and connected to the torch as an assembly. Applicant disagrees that the plurality of consumable components of Raney et al. are merely nested prior to being attached to a torch. They are in fact not interconnected to one another. This is the same type of assembly, and method of connecting the assembly to a torch, Applicant discussed in the Background of the Invention.

The Examiner maintains that "[i]t is clear that since Luo teaches the basic torch structure claimed in the instant invention, and since Raney et al teach [sic] as specified above that combining multiple; [sic] torch elements into larger integral components is beneficial, the Examiner submits that one of ordinary skill in the art would; [sic] find it well within that level of ordinary skill to combine multiple torch components into integral ones." In essence, the Examiner concludes that because Raney et al. discloses combining some torch parts into unitary assemblies, one would then suddenly find forming a one-piece assembly of any of the components of the torch obvious thereover. Applicant respectfully disagrees. Raney et al. merely discloses an electrode with an integral cooling tube and a swirl ring connected to a nozzle. Such an assembly is not what is called for in the present claims, nor is it related to the components called for the way Applicant calls for those components to be constructed.

As the Examiner is well aware, in order to establish a *prima facie* obviousness rejection, one requirement is that the combined references include all of the elements of the claimed invention. Even combining the references, the combination of references do not include each and every element of the claims as required to establish a *prima facie*

Matus, Tim A.

S/N: 10/605,931

obviousness rejection. No "interpretation" of the references is required. MPEP §2141.02.I further requires that references be considered "as a whole". "In determining the differences between the prior art and the claims, the question under 35 U.S.C. 103 is not whether the differences themselves would have been obvious, but whether the claimed invention as a whole would have been obvious." MPEP §2141.02.I, (emphasis in original). Under the guidance provided in MPEP §2141.02.I, Applicant has provided a solution to a problem – i.e. preventing the connection of an improperly assembled consumable assembly with a torch, whereas Raney et al. prevents operation of the torch but does not prevent the connection of the improperly assembled consumable assembly with the torch. That which is prevented by the claimed assembly is expressly permitted by the assembly of Raney et al. The conclusion that that which is called for in the present claims is obvious in light of Luo in view of Raney et al. requires complete disregard for that which is expressly disclosed in Raney et al. and requires disregard of the "as a whole" requirement of MPEP §2141.02.I.

Claim 1 calls for, in part, a plasma torch consumable assembly having a tip integrally connected with a shield cup and an electrode to form a **one-piece assembly** wherein the tip is constructed to secure the one-piece assembly to a torch body. Such is not suggested in either reference, and therefore, is not suggested in the combination. Claim 12 calls for, in part, a **one-piece consumable assembly** which includes an electrode and a tip fixedly connected to a cap wherein the tip and constructed to snap-fit the consumable assembly to the torch. Claim 14 defines a replacement plasma torch consumable kit wherein at least two of a shield cup, an electrode, and a tip are press-fit to one another. Claim 22 calls for a method of manufacturing a plasma torch consumable assembly which includes, in part, the step of integrally connecting an electrode within a perimeter of a tip in a single unitary consumable structure. Each of these independent claims specifies a plurality of components, which of those components are connected, and how those component are connected. The art of record simply does not teach or suggest that which is called for in the present claims. There is no suggestion to combine the components as is done in these claims. Furthermore, the Examiner's interpretation of the references removes statements from the context in which they are given and ignores other disclosure contained therein. Only the application of Applicant's disclosure to the art of record suggests the Examiner's combination.

Raney et al. teaches (1) a two part electrode assembly, (2) a swirl ring that is attached to a nozzle, and (3) three distinct and separate electrode, tip, and nozzle elements. This is not

Matus, Tim A.

S/N: 10/605,931

what is currently claimed. Raney et al. states that “[t]he invention includes *three separate and distinct* elements: (1) an electrode having an integral, hollow, interior cooling tube, (2) a tip element with an integral swirl ring, and (3) a nozzle.” Col. 3, lns. 11-14. Raney et al. further states that “[i]f the operator fails to include the tip element with the integral swirl ring when re-assembling the torch, the electrode will be driven by the force of the inlet gas to the base of the nozzle when the trigger is depressed.” Col. 3, lns. 23-27. That is, Raney et al. does not teach or suggest a one-piece or unitary consumable assembly as claimed and, in fact, Raney et al. expressly states that electrode, tip and swirl ring, and nozzle are “*three separate and distinct elements*.” This express disclosure cannot simply be ignored.

Raney et al. further teaches the benefits of the three separate and distinct element construction of the assembly disclosed therein. Raney et al. states that the “front-end assembly generally screws to the torch head” and that “worn components can therefore be easily replaced by operators in the field merely by unscrewing the nozzle and replacing one or more of the worn components.” Col. 1, lns. 32-36. This disclosure of Raney et al. directly contradicts the Examiner’s application of Applicant’s disclosure thereto. That is, it is the one-piece assembly that is replaced and not the individual constituent components thereof. The Examiner has simply applied the disclosed benefits of Applicant’s own invention to a statement removed from its context of the reference. In doing so, the Examiner has fallen prey to the insidious effects of impermissible hindsight and disregarded the “as a whole” requirement of reference consideration.

The Examiner’s conclusion that one of ordinary skill in the art would be motivated to provide a one-piece assembly as presently claimed directly contradicts the express disclosure of Raney et al. that the (1) electrode, (2) the tip and swirl ring, and (3) the nozzle are three separate and distinct elements of the assembly. This disclosure of Raney et al. is explicit and cannot simply be ignored or discounted. Furthermore, the disclosure of Raney et al. that worn components of the assembly can be “easily replaced by operators in the field” directly contradicts the Examiner’s assertion that the one-piece consumable assembly of the claims is suggested therein. No degree of interpretation of the reference is required. The statements of the reference are explicit and teach away from the one-piece assembly called for in the present claims. Raney et al. discloses that the elements called for in the present claims as a one-piece or unitary consumable assembly are three separate and distinct elements. Raney et al. provides a reason for the separate and distinct nature of the elements. Raney et al., even in

Matus, Tim A.

S/N: 10/605,931

combination with Luo, does not disclose, teach, or suggest a one-piece or single unitary consumable assembly as called for in the present claims. Accordingly, since the art or record does not teach, suggest, or disclose each and every element as called for in the present claims and as is required to support a rejection under §103, Applicant asserts claims 1-27 are patentably distinct thereover.

Applicant has enclosed herewith a Credit Card Authorization in the amount of \$620.00 for the Notice of Appeal filed herewith and the one-month extension of time for response.

Applicant appreciates the Panel's review and consideration. In light of at least the foregoing, Applicant requests the Panel's favorable action in reversing the Examiner's prior art rejections and timely issuance of a Notice of Allowance for claims 1-27.

Respectfully submitted,



Kirk L. Deheck
Registration No. 55,782
Phone 262-376-5170 ext. 16
kld@zpspatents.com

Dated: March 8, 2006.
Attorney Docket No.: ITW7510.067

P.O. ADDRESS:
Ziolkowski Patent Solutions Group, SC
14135 North Cedarburg Road
Mequon, WI 53097-1416
262-376-5170